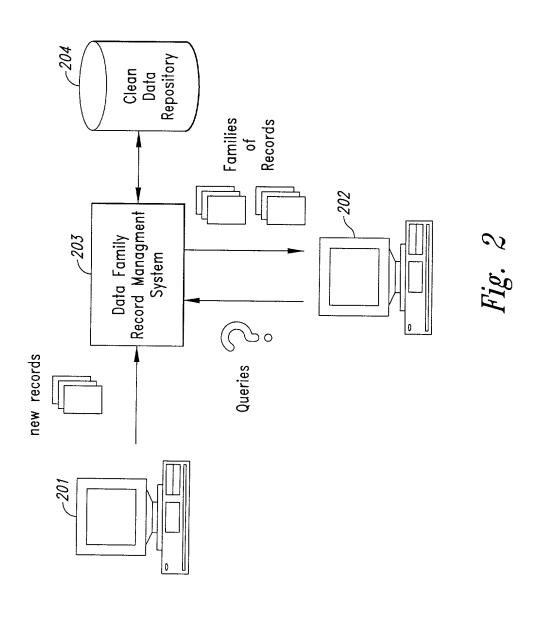


Fig. 1



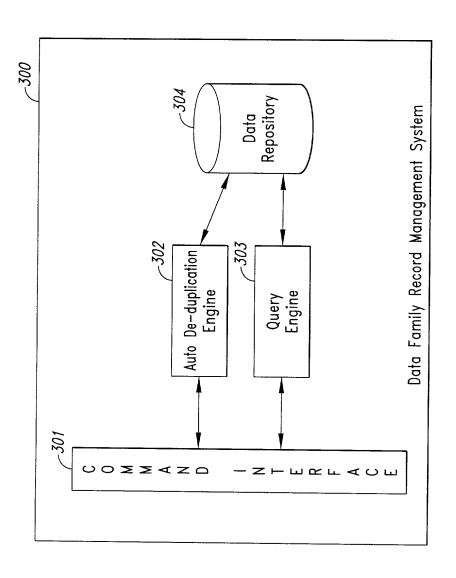


Fig. 3

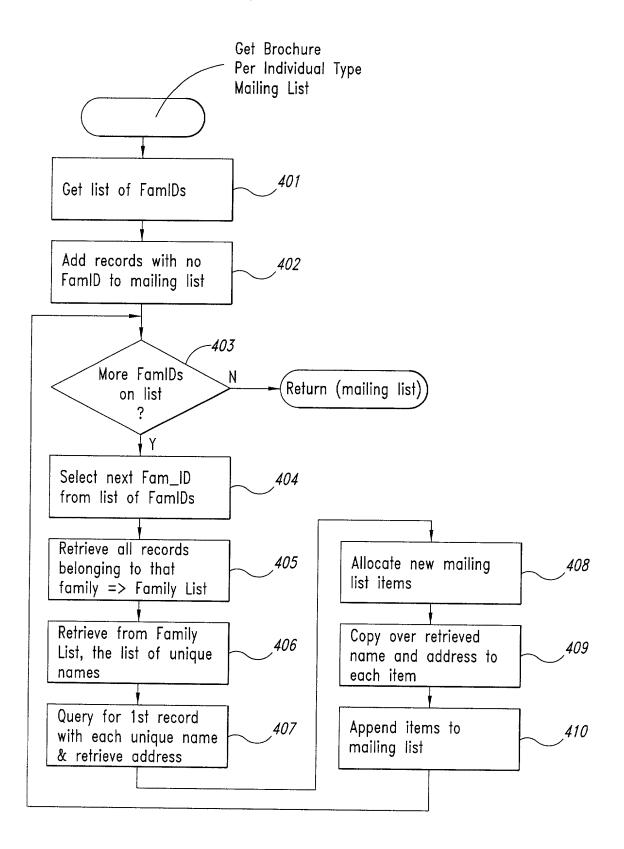


Fig. 4

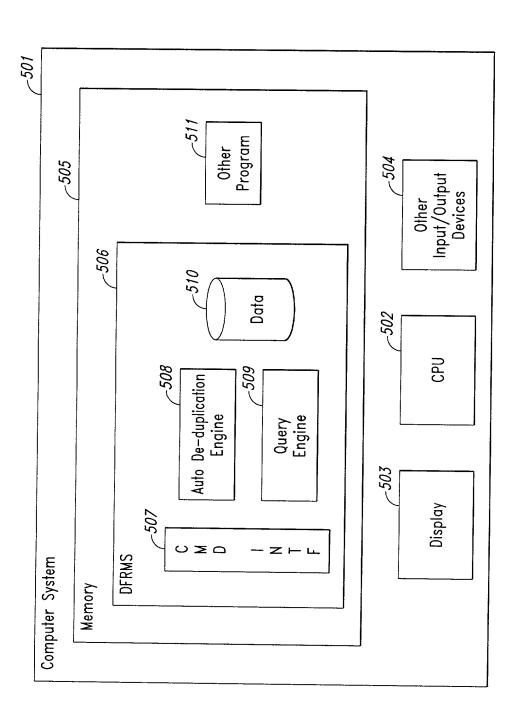


Fig. 5

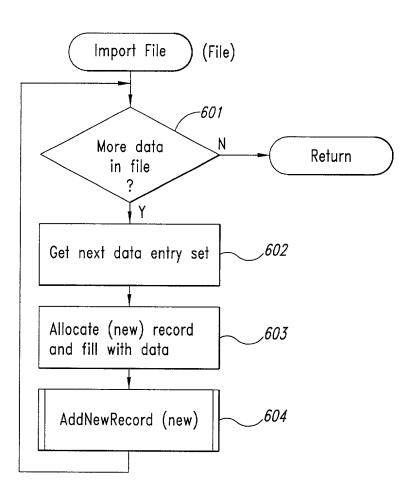


Fig. 6

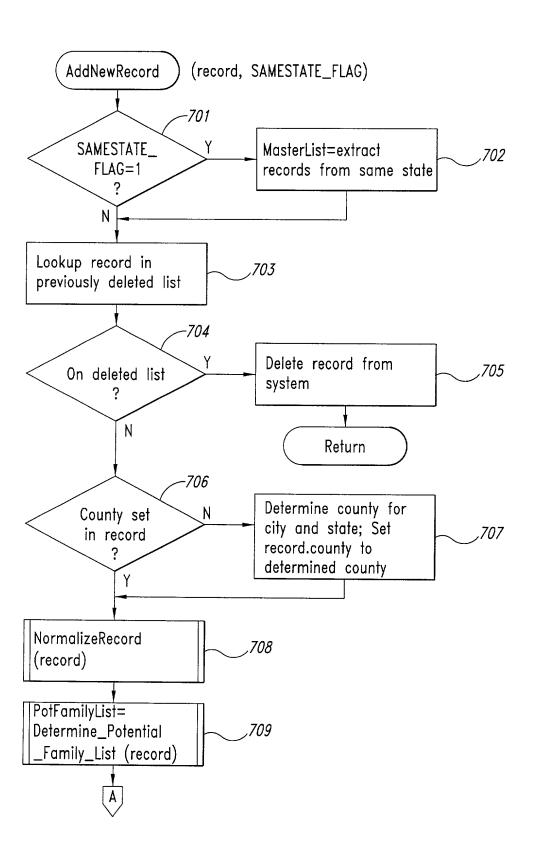


Fig. 7A

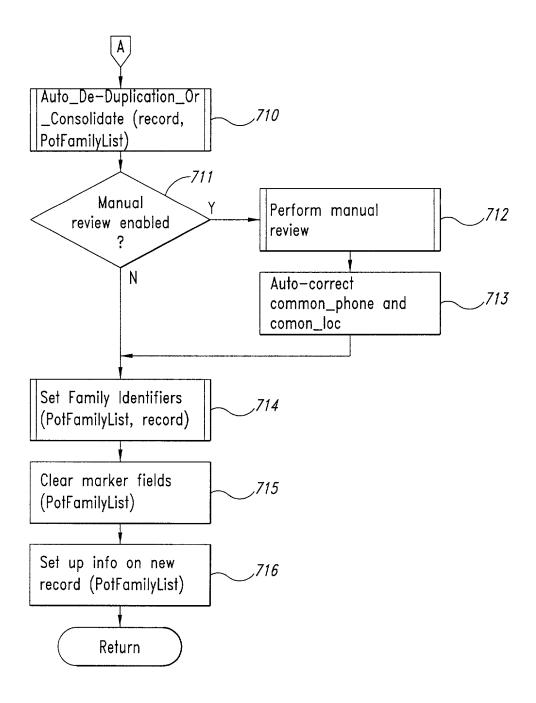
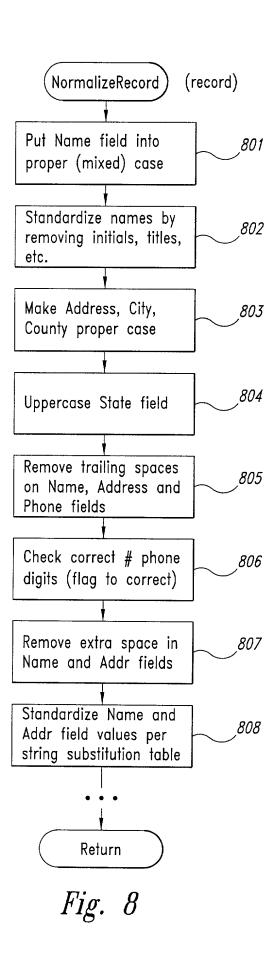


Fig. 7B



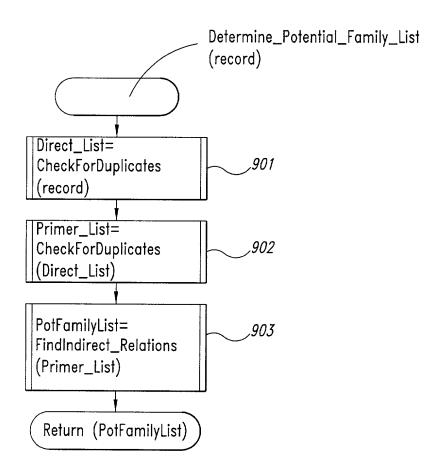


Fig. 9

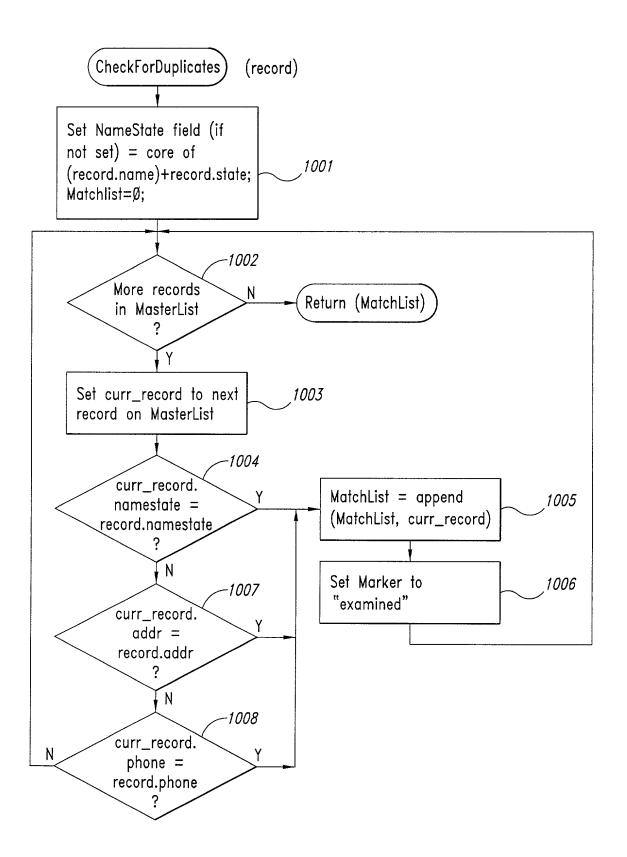


Fig. 10

Table 1: Results After Direct Check of New Record
Summary: Record 9 located Record 1 (by Phone). Records 7 and 8 (by Address) and Record 4 by NameS

				Common	Common Common			
#	# NameState	Address	Phone	Phone	Location Family	Family	Source of Match	,
-	Fuel Processors, WA	701 First Avenue	367-3319			51	Phone	1101
ભ	Fuel Processors, WA	12521 30th Street NW	526-6149	-		51		7
B	Fuel Processors, WA	222 15th Avenue NE	555-1212	8	6	51		
4	Oil Re-Refining, WA	345 Center Street	526-6149	-		51	NameState	
3	John's Oll-Refining, WA	222 15th Avenue	555-1212	2	6	51		
9	John's Oil-Refining, WA	1600 Oak Tree Road	614-9200			51		
7	John's Oil Pickup, WA	11750 33rd Place	417-6000		33	7	Address	
8	John's Service, WA	11750 33rd Place	417-3251 /		33	7	Address	
တ	Oil Re-Refining, WA /	11750 33rd Place //	367-3319				NEW RECORD	

Found Order Record to Check Potential Family Y es Y es Y es Source of Match Address Address NameState NEW RECORD Family 51 7 7 51 Common Location ဗ္ဗ ဗ္ဗ Common Phone 367-3319 417-6000 417-3251 526-6149 367-3319 Table 2: Potential Family List (Found Set) After Direct Check (Sorted by NameState) Fuel Processors, WA John's Oil Pickup, WA John's Service, WA Oil Re-Refining, WA NameState - 1 8 4 6

Fig. 11

puno. Order

Record to

Check

Family Yes Yes Yes Yes Yes Yes

Source of Match Record to Check

NameState NameState Phone

55

The same of the same of the same

51 5 2 6

Table 3: Results After Direct Check of Records in Table 2

Results After Loop 1

Summary: Record 1 located Record 9 (by Phone), Record 2 (by NameState) and Record 3 (by NameState), marks them as Potential Family members,

Family Location Commor 33 Common Phone 367-3319 526-6149 555-1212 417-6000 367-3319 526-6149 11750 33rd Place 12521 30th Street NW 11750 33rd Place 345 Center Street 11750 33rd Place Address 701 First Avenue 222 15th Avenue and adds them to the end of the list John's Oil Pickup, WA Fuel Processors, WA Fuel Processors, WA Fuel Processors, WA Oil Re-Refining, WA Oil Re-Refining, WA John's Service, WA NameState

Subsequent Results:

been assigned to this record (indicating there are already at least two records with this Address), the Common Location number is copied over to other records with the Summary Loop 2: Record 7 located Record 8 (by Address) and Record 9 (by Address), both previously found. Seeing that a Common Location ID has been already same Address that have an empty Common Location field, e.g. Record 9.

Summary Loop 3: Record 8 located Record 7 (by Address) and Record 9 (by Address), both previously found.
Summary Loop 4: Record 4 located Record 2 (by Phone) and Record 9 (by NameState), both previously found.
Summary Loop 5: Record 9 located Record 1 (by Phone), Record 7 (by Address) and Record 9 (by Address), all previously found.

Fig. 12

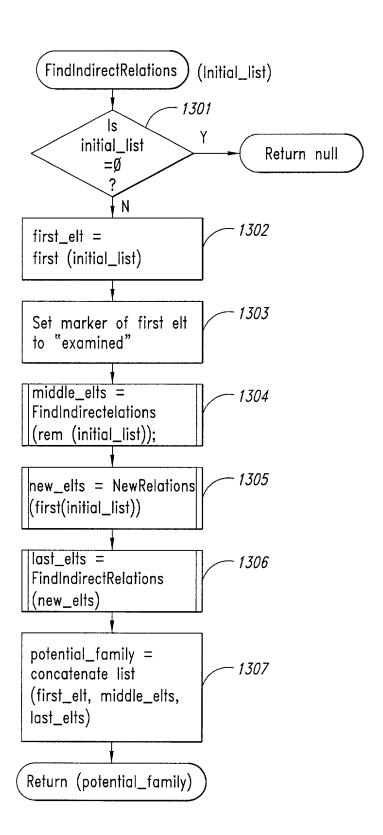


Fig. 13

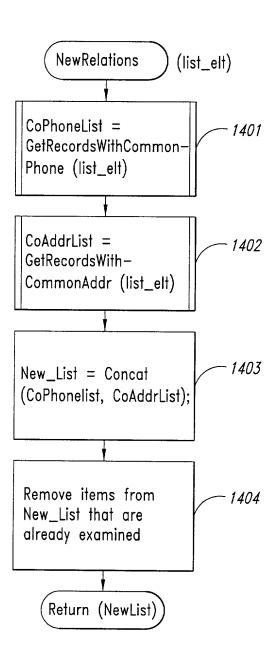


Fig. 14

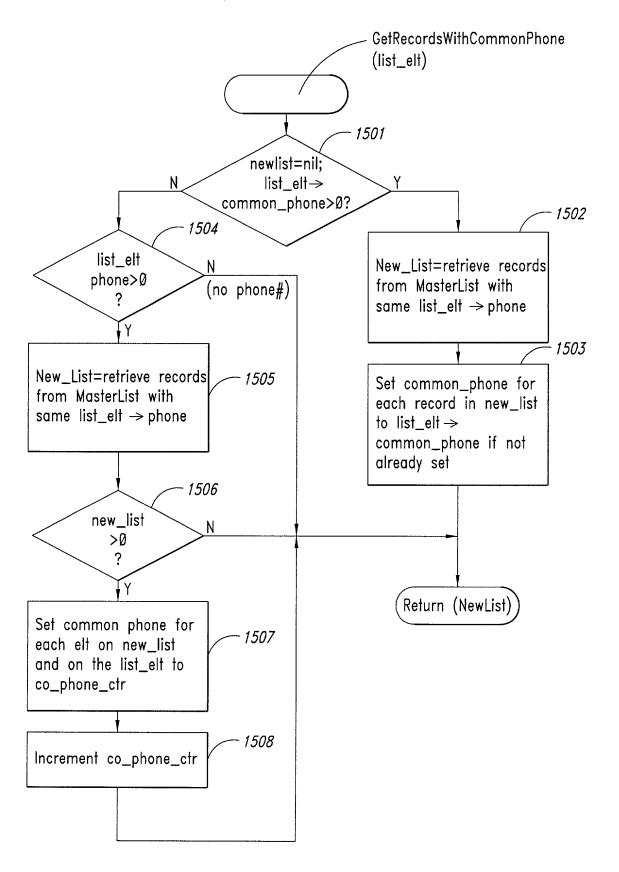


Fig. 15

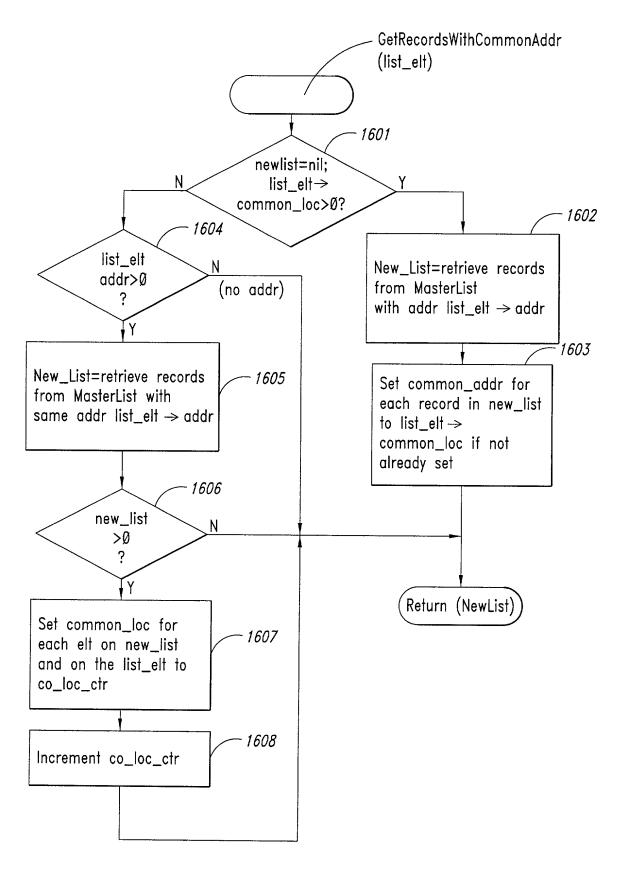


Fig. 16

Results After Indirect Search

Table 4: Results After Loop 1

Table 5: Subsequent Results

Note: Refer to Tabler 1 above for a complete list.

Summary Loop 2: Record 7 located Record 8 (by Address) and Record 9 (by Address), both previously found. Seeing that a Common Location ID has been assigned to this record, the Common Location number is copied over to other records with the same Address that have an empty Common Location field, e.g. Record 9.

Summary Loop 3: Record 8 located Record 7 (by Address) and Record 9 (by Address), both previously found.

Summary Loop 4: Record 4 located Record 2 (by Phone), previously found.

Summary Loop 5: Record 9 located Record 1 (by Phone), previously found.

Summary Loop 6: Record 2 located Record 4 (by Phone), previously found.

Summary Loop 6: Record 2 located Record 5 (by Phone and Address), a new record and adds it to the bottom of the list.

_)			
								Potential	Record to	ביוווים
**	# NameState	Address	Phone	Phone	Cation	Family	Source of Watch	Camille	1	
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_	WAA 's Document I I I I	/ O.I. P.IIST AVENUE	367-3319					\ \		_
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-	CAL SHOW THE CHILD	LIVE SOID LEGGE	2000		333	7		\ \	7	·
_	John's Service 10/0	447EO 00ml Diego	77100			•]		3	•	4
, _		TOO SOID LIBOR	417-3251		333	7		\ \ \	1	·
_	Cil Do Doffning WA	OAE Cantan Change		•	,	•		3	•	n
_	Car regulation and a	S45 Center Street	526-6149			,		Yac	7	•
_	Oil Ra-Refining 1874	447EA 22rd Diago	0100 100		•			2	•	ŧ
•	Can Server and San	11730 Sord Prace	367-3319		33			Yee	7	ч
~	Fuel Processors WA	12521 30th Ctroot MIM	578 6140	•	1	ì		3	•	,
-		יליבן יחווו חוובנו ואא	220-0143	_		ົດ		Yes	7	œ
,-) 	Fuel Processors, WA	222 15th Avenue >	555-1010 V	r	c	70	0.000	;	• 1	> ;
_		A DELICATION WITH	2121-000	7	מ	<u></u>	Kecord to Check	Yes	7	_
	John's Oil-Refining, WA	222 15th Avenue 🔻	555-1010	ç	c	ŭ	Dhone and Address	;	. 1	
J) N. ()	7 7 7	7	77	_	אינטער שרטער שרטער	\ \ \	_	٥

Fig. 17

Table 6: Complete Results After Loop 8 of Indirect Search Summary: Record 5 located Record 3 (by Phone), previously found, and the loop ends.

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	Found	Oraer	- 0	7 (ייניי	4 n	n u	1 0	, ,
	Record to	Cileck	0 0	0	0 0	2 0 0	o a		0 (
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	Source of Match	Tools of March						Phone	December Of the of
	Family	51	5 ^	٠,	, <u>r</u>	5	51	. <u>.</u>	, ú
	Common		33	3 6	3	33	}	σ	0
	Common Common Phone Location				-	•	-	2	
	Phone	367-3319	417-6000	417-3251	526-6149	367-3319	526-6149	555-1212	555-1212
	Address	701 First Avenue	11750 33rd Place	11750 33rd Place	345 Center Street	11750 33rd Place	12521 30th Street NW	222 15th Avenue	222 15th Avenue
	# NameState	Fuel Processors, WA	7 John's Oil Pickup, WA	3 John's Service, WA	4 Oil Re-Refining, WA	Oil Re-Refining, WA	? Fuel Processors, WA	3 Fuel Processors, WA	 John's Oil-Refining, WA
1	77	•	•	~	4	Ų,		v.)	47

Fig. 18

Record 5 only off of the NameState, Record 6 would not have been located by the Embedded Search on Record 5. The reasoning behind excluding the NameState in the Embedded Search so Record 5 only off of the extended relationship of Record 6 to the original set of records being searched on. It is, at this point, fairly removed and the Family ID loses some meaning. While this is not a common occurence, a final loop searching off of the Families present in the final set of found records can find any remaining missing family members, thus picking up Record 6 if desired. Alternatively, the NameState can be included in the Embedded Search. Note: NameState is not included in the Embedded Search loop as shown herein, although it can be. In this case, in the event that a Record 6 exists that matches Table 7: Alternative: Using NameState in the Embedded Search

				Common	Common			Dotomotical	21 P. C. C. C.	
*	NameState	Address	Phone	Phone	Cation	Family	Course of Match	roteilta	Necord to	Lound
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- !	COLL INCESSOIS, WA	vol ritst Avende	507-3319			2,		Yes	σ	ļ
7	John's Oil Pickup, WA	11750 33rd Place	417-6000		33	7		3 5	• •	- (
α	John'e Conice MA	44750 55-4 DI			3	- 1		2	ח	7
•	SOUTH SOUNDS AND	11/50 SSrd Place	417-3251		ဗ	_		Ϋ́	σ	~
4	Oil Re-Refining, WA	345 Center Street	526-6149	-		ŭ		3 5		> -
6	Oil Re-Refining, WA	11750 33rd Place	367.3340	•	00	5		S ;	יפ	4 :
c	Circle Discount 1878	200 CO 100 CO 10	000		ટ્ર			Yes	on	'n
4	Line Linessons, VVA	12521 30th Street NW	526-6149	_		51		Yes	o	ď
ო	Fuel Processors, WA	222 15th Avenue	555-1212	•	σ	ň		3 5	, (
ĸ	John'e Oil-Daffning M/A	222 4Esh Assessed	0.00	; (•	5		20	D	_
•	VAA 'Bullial'-lio cuilos	anuave inci 222	7171-000	7	ဘ	51	Record to Check	Yes	o,	~
٥	John's Oil-Refining, WA	1600 Oak Tree Road	614-9200			51		, Vec	ď	

Fig. 19

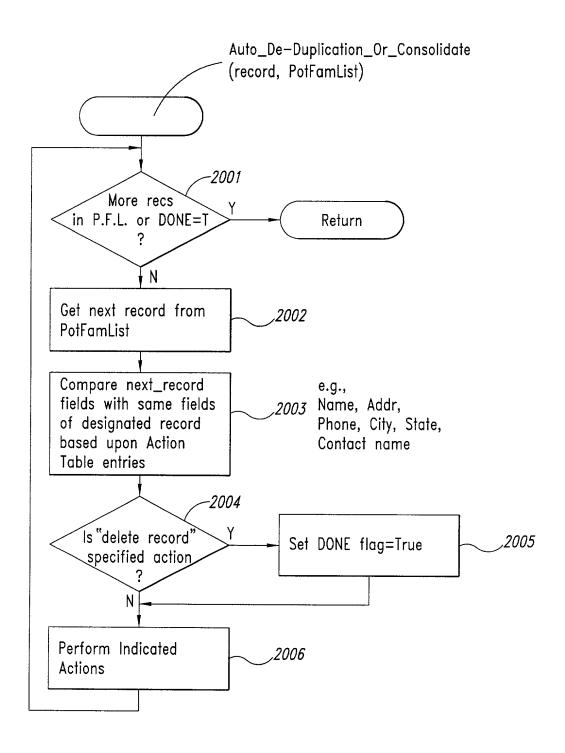


Fig. 20

Automatic De-Duplication

Table 8: Results After Dedup
Summary: Common Phone IDs are assigned to Records 1 and 9.

Ĺ	and it is a second of the seco	assigned to recolus 1 &									
				Common	Common Common			Potential	Pacord to	County	,-
	# NameState	Address	Phone	Phone	Location	Family	Source of Watch	. Camilla	Chook to		
_	1 Fuel Processors, WA	701 First Avenue	367,3310	7		24	Course of maker	railiny	CHECK	Craer	
_)	50.00	ว		5		Yes	σ	•	_
_	/ John's Furnace Repair, WA	11750 33rd Place	417-6000		33	7		\ \ \		- ແ	
	8 John's Service, WA	11750 33rd Place	117.2354		;	٠ ١		<u> </u>	D ·	7	
_		200	1070-111		2			Yes	σ		_
_	4 Oil Re-Refining, WA	345 Center Street	526-6149	-		ž		3 5		,	
_	O Oil Re-Refining M/A	447E0 32-4 Diese	000000000000000000000000000000000000000		;	5		S	D	4	_
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_	2 Fuel Processors, WA	12521 30th Street NW	526-6149			ž		3 5	•	> 0	
_	True Description 1944		2	•		5		res	מכ	9	_
_	o ruel Processors, MA	222 15th Avenue	555-1212	7	o.	51		٧٥	c	,	_
_	5 John's Oil Doffning 1878	A Park A	4. 4.	1 (, ,	;		20-	D	•	_
•	AM (SIIIII) CILLY OF T	777 John Avenue	555-1212	7	o	ī.	NameState	Ϋ́ος	o	۰	_
_	S. John's Oil-Refining WA	1800 Oak Tree Book	0000			; ;		20	n	•	_
						ú	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	>			

Fig. 21

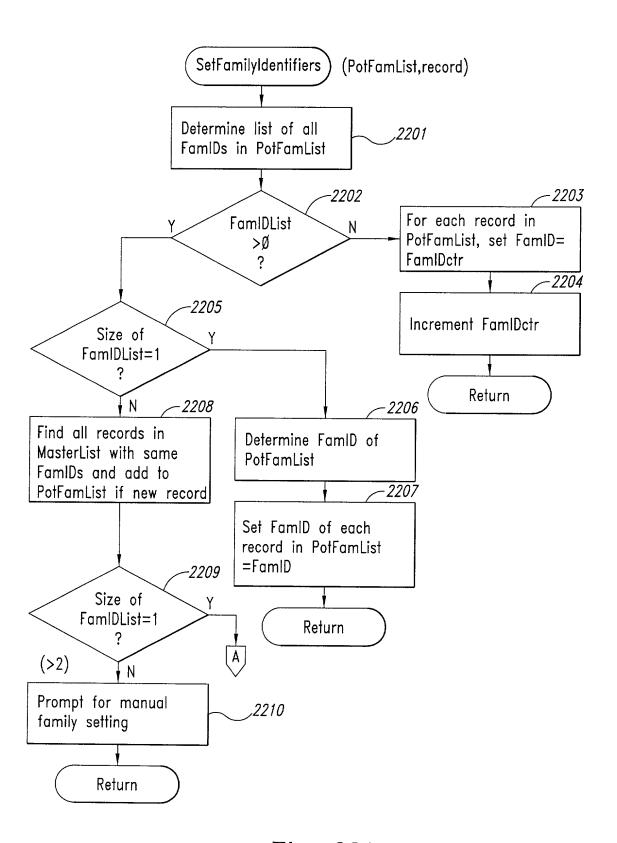


Fig. 22A

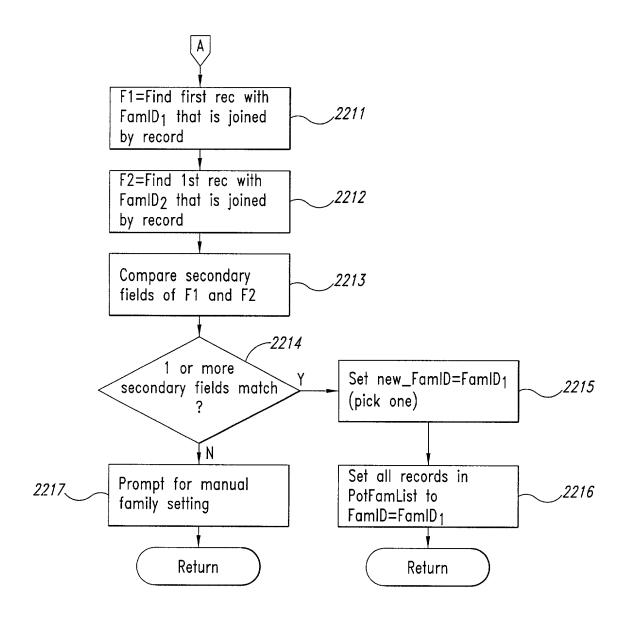


Fig. 22B

Match

Alt Phone Match Group 8 8 8 8 8 8 8 8 8 8 8 Source of Match **NEW RECORD** NameState Phone <u>ភ</u> ស ស ស ស ស Common Location 33 33 Common Phone 367-3319 526-6149 555-1212 526-6149 555-1212 614-9200 367-3319 417-6000 Table 9: Marriage (Coatescing Families)
Summary: Family 51 and Family 7 are joined by the new record. 12521 30th Street NW 222 15th Avenue NE 1600 Oak Tree Road 222 15th Avenue NE 11750 33rd Place 11750 33rd Place 345 Center Street 701 First Avenue John's Oil-Refining, WA John's Oil-Refining, WA Oil Re-Refining, WA John's Oil Pickup, WA John's Service, WA Fuel Processors, WA Fuel Processors, WA Fuel Processors, WA Oil Re-Refining, WA NameState * 0 to 4 to 0

Fig. 23

Table 10: Unrelated Families

Fig. 24